

REMARKS/ARGUMENTS

Claims 34 - 36 are rejected under 35 U.S.C. § 112 and 35 U.S.C. § 103. In light of the amendments above and the arguments below, Applicants respectfully request reconsideration.

Applicants note that claim 34 has been revised and presented in a different format.

§ 112 Rejections

Claims 34 - 36 are rejected as indefinite. The Office Action states that "the term 'substantially' renders claims 34 - 36 indefinite. It is unclear as to what degree the term would encompass and by what criteria the term is measured."

Applicants do not agree with the Examiner's analysis but have removed the disputed phrase and amended the claims to specify that the amplified product is present at an amount greater than product created with equal primer concentration. In new claim 37 the product is present in at least 3.59 times the amount of product produced with equal primer concentration. Support for these limitations can be found on page 59, beginning at line 1, of the specification.



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§ 103 Rejections

The Office Action has rejected claims 34 - 36 under 35 U.S.C. § 103 as being unpatentable over Karron, et al. in view of Wu, et al. further in view of Sninsky, et al. The Examiner cites Karron as teaching PCR rapid detection of HPIV-3 but notes that Karron do not teach unequal primer concentration. The Examiner cites Wu, et al. as teaching a method of performing a PCR reaction using unequal primer concentration and Sninsky, et al. as teaching detection by hybridizing with a probe that is complementary to a nucleic acid.

Applicants note that the Examiner's cited art does not describe a system wherein the nucleic acid sample is exposed "to at least two primer pairs specific for a target nucleic acid . . ." as Applicants' claims require. Applicants emphasize the importance of their discovery as an amplification system where multiple nucleic acid samples are exposed to primers and the amplification product is detectable. Applicants are interested in the rapid, efficient and reproducible detection of nucleic acid targets when at least two targets are exposed to primers at the same time. This is the aspect of the present invention that Applicants' specification highlights and is a scientifically and commercially

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important feature of Applicants' invention. As in the response to the § 112 rejection above, Applicants point out that their system produces an amplification product that is present in a greater amount than that product produced with equal primer concentration. This product concentration increase has beneficial consequences in terms of clinical detection assay services.

Applicants believe the claims to be allowable and respectfully request a Notice of Allowance. A Petition and Fee for One Month Extension of Time is enclosed. If further fees are necessary, please charge Deposit Account 17-0055.

Respectfully submitted,

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